

Title (en)

SIGNAL DEMODULATION METHOD AND DEVICE USING VELOCITY VECTORS OF A MOBILE TERMINAL

Title (de)

VERFAHREN UND VORRICHTUNG ZUR SIGNALDEMODULATION DURCH VERWENDUNG VON GESCHWINDIGKEITSVEKTOREN IN EINEM MOBILEN ENDGERÄT

Title (fr)

PROCÉDÉ ET DISPOSITIF DE DÉMODULATION DE SIGNAL UTILISANT DE VECTEURS DE VITESSE D'UN TERMINAL MOBILE

Publication

**EP 3001621 A1 20160330 (EN)**

Application

**EP 14800268 A 20140429**

Priority

- CN 201310195569 A 20130523
- CN 2014076514 W 20140429

Abstract (en)

Provided are a signal demodulation method and device, so as to reduce the influence of Doppler frequency shift on the communication rate. When a received radio-frequency signal transmitted by a base station is demodulated, after a reference clock signal provided by a PMU is acquired, it is also required to determine a moving speed of a mobile terminal and determine a Doppler frequency offset value generated when the mobile terminal receives the radio-frequency signal transmitted by the base station according to the moving speed, and then the received radio-frequency signal transmitted by the base station is demodulated according to the reference clock signal and the Doppler frequency offset values. Since the influence of Doppler frequency offset is taken into account when a radio-frequency signal transmitted by a base station is demodulated, the demodulation accuracy is very high, thereby avoiding the problem of too slow a communication rate when Doppler frequency shift exists.

IPC 8 full level

**H04L 25/02** (2006.01); **H04L 27/00** (2006.01)

CPC (source: EP RU US)

**G01S 11/10** (2013.01 - RU US); **G01S 19/52** (2013.01 - RU US); **H04L 27/0014** (2013.01 - EP US); **H04W 4/027** (2013.01 - EP US);  
**H04W 56/0035** (2013.01 - EP US); **H04L 2027/0036** (2013.01 - EP US); **H04L 2027/0046** (2013.01 - EP US); **H04L 2027/0083** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3001621 A1 20160330; EP 3001621 A4 20161214; EP 3001621 B1 20180321;** BR 112015014184 A2 20170711; CN 103269259 A 20130828;  
CN 103269259 B 20160921; IN 4051DEN2015 A 20151009; JP 2016504818 A 20160212; JP 6096919 B2 20170315;  
KR 101715799 B1 20170327; KR 20150079743 A 20150708; MX 2015007308 A 20150910; MX 346064 B 20170303; RU 2607638 C1 20170110;  
US 2016080906 A1 20160317; US 9712974 B2 20170718; WO 2014187231 A1 20141127

DOCDB simple family (application)

**EP 14800268 A 20140429;** BR 112015014184 A 20140429; CN 201310195569 A 20130523; CN 2014076514 W 20140429;  
IN 4051DEN2015 A 20150513; JP 2015543307 A 20140429; KR 20157013497 A 20140429; MX 2015007308 A 20140429;  
RU 2015128654 A 20140429; US 201514946987 A 20151120